State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2501 Golf Course Rd.
Ashland WI 54806

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



September 20, 2019

MR STEPHEN A YACH 226 JACOWAY LN HOT SPRINGS AR 71913

CERTIFIED MAIL RETURN RECEIPT REQUESTED

SUBJECT:

Notification of Residual Contamination and Continuing Obligations Property Access for Filling and Sealing Groundwater Monitoring Wells

Tower Standard Service, 14267 State Highway 70 West, Lac du Flambeau, Wisconsin

WDNR BRRTS #03-64-127899

Dear Mr. Yach:

The purpose of this letter is two-fold: To provide you with notification of the pending case closure of the above-named site and continuing obligations associated with residual contamination; and to inquire about the groundwater monitoring wells that were installed on your property at 14277 State Highway 70 West in Lac du Flambeau (Vilas County Tax Parcel #10-1986). Please read this letter carefully, in its entirety.

Your Long-Term Responsibilities as a Property Owner and Occupant

The owners of the Tower Standard Service site have investigated a petroleum discharge from underground storage tanks removed from that site in the 1990s. The case was originally closed by the DNR in 2006 but was reopened in March 2015 based on additional sampling data collected for the Lac du Flambeau Tribal Natural Resources Department. Additional investigation has been completed since the case was reopened, and the owners of the Tower Standard Service site requested in July 2019 that the case be approved again for closure. Closure means that the DNR will not be requiring any further investigation or cleanup action to be taken. However, continuing obligations may be imposed as a condition of closure approval.

The continuing obligations that will affect your property are listed below, under the heading <u>Continuing</u> <u>Obligations on Your Property</u>. The continuing obligation for residual groundwater contamination is the same continuing obligation that was applied to your property as part of the original case closure approved in 2006. Under Wisconsin Statute Section 292.12 (5), current and future owners and occupants of this property are responsible for complying with continuing obligations imposed as part of an approved closure.

The attached fact sheet "Continuing Obligations for Environmental Protection" (Publication RR-819) has been included with this letter, to help explain the responsibilities you may have for maintenance of a certain continuing obligation, the limits of any liability for investigation and cleanup of contamination, and how these differ. If the fact sheet is lost, you may obtain copies at http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf.

Groundwater contamination originated at the property located at 14267 State Highway 70 West in Lac du Flambeau, which the DNR refers to as the Tower Standard Service site. The DNR has determined that groundwater contamination is also present at the property immediately east of the Tower Standard Service site;



the former street address of this second property is 14257 State Highway 70 West. The second property is also identified as Vilas County Tax Parcel #10-1987. The groundwater contamination from the second property has become commingled with the contamination from the Tower Standard Service site, and that contaminated groundwater has migrated onto your property at 14277 State Highway 70 West. The levels of contamination in the groundwater on your property are above the state groundwater enforcement standards found in Wis. Admin. Code ch. NR 140.

However, the environmental consultants who have investigated this contamination have demonstrated to the DNR that this groundwater contaminant plume is stable or receding and will naturally degrade over time. The DNR believes that allowing natural attenuation, or the breakdown of contaminants in groundwater due to naturally occurring processes, to complete the cleanup at this site will meet the case closure requirements of Wis. Admin. Code ch. NR 726. As part of the request for case closure, the DNR will accept natural attenuation as the final remedy for this site.

The DNR fact sheet, "What Landowners Should Know: Information About Using Natural Attenuation to Clean Up Contaminated Groundwater" (Publication RR-671) has been included with this letter, to help explain the use of natural attenuation as a remedy. Additional copies of the fact sheet may be obtained at http://dnr.wi.gov/files/PDF/pubs/rr/RR671.pdf.

Continuing Obligations on Your Property

The following continuing obligations will be included as a condition of closure approval at your property, to address future exposure to residual contamination. You and any future owners of your property will be responsible for the following continuing obligations.

Residual Groundwater Contamination (Wis. Admin. Code chs. NR 140, 812)

Groundwater contamination greater than enforcement standards is present both on the Tower Standard Service property and off this contaminated property, as shown on the attached Figure B.3.B.1: Groundwater Isoconcentration (7/26/2016), prepared by REI and dated April 9, 2019. If you intend to construct a new well, or reconstruct an existing well, you'll need prior DNR approval.

The following continuing obligations might also be included as a condition of closure approval at your property, to address future exposure to residual contamination. You and any future owners of your property would then be responsible for the following continuing obligations.

Monitoring Wells that could not be Properly Filled and Sealed (Wis. Admin. Code ch. NR 141)

Four groundwater monitoring wells (MW16; MW16@37-42; MW17 and MW17@31-36) were installed on your property as part of the investigation of the Tower Standard Service site; the wells are shown on the attached Figure B.3.D: Monitoring Wells, prepared by REI and dated April 9, 2019. REI reportedly has been unable to contact you in the past year or so to arrange access for sampling of these monitoring wells. REI will now need access from you in order to properly fill and seal (abandon) the monitoring wells as part of the case closure. If you do not allow access so the wells can be abandoned, you may be responsible for any problems associated with the monitoring wells if they create a conduit for contaminants to enter groundwater.

For the purpose of completing the case closure process at the Tower Standard Service site in a timely manner, please respond to the Department of Natural Resources in writing with your decision to allow access for filling and sealing of the monitoring wells within 14 days from the date you receive this letter. Failure to provide an adequate response within this time frame will result in a recommendation for the transfer of responsibility to you for the monitoring wells and any potential future liability that may be associated with them.

If you have any questions regarding the content of this letter, please contact me at (715) 685-2920, or by email at Christopher.Saari@Wisconsin.gov.

Thank you for your attention to this matter.

Sincerely.

Christopher A. Saari

Northern Region Team Supervisor

Remediation and Redevelopment Program

Attach:

- Figure B.3.B.1: Groundwater Isoconcentration (7/26/2016), REI, April 9, 2019
- Figure B.3.D: Monitoring Wells, REI, April 9, 2019
- Continuing Obligations for Environmental Protection, DNR Publication RR-819
- What Landowners Should Know: Information About Using Natural Attenuation to Clean Up Contaminated Groundwater, DNR Publication RR-671

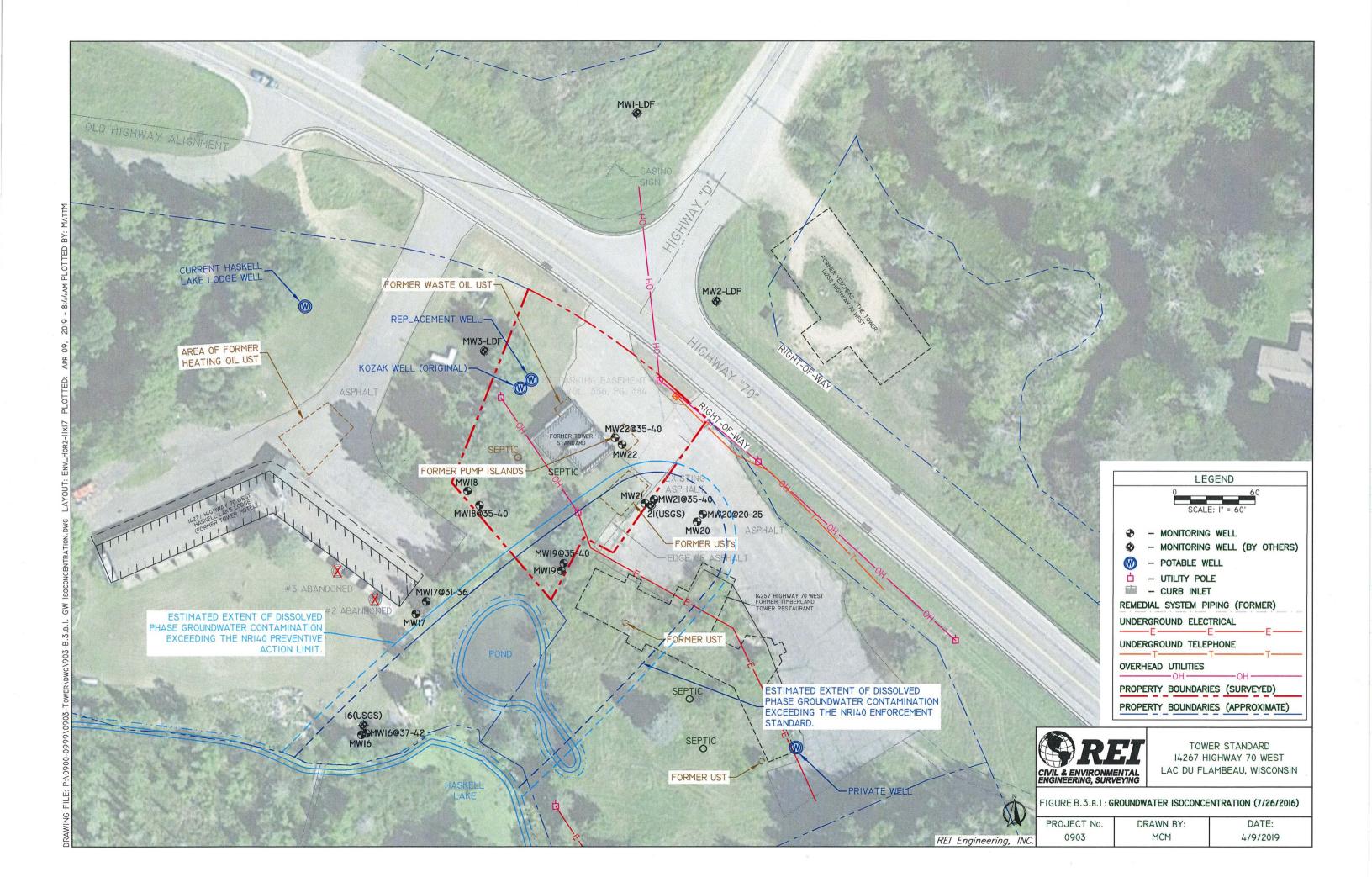
cc: Bill and Linda Kozak

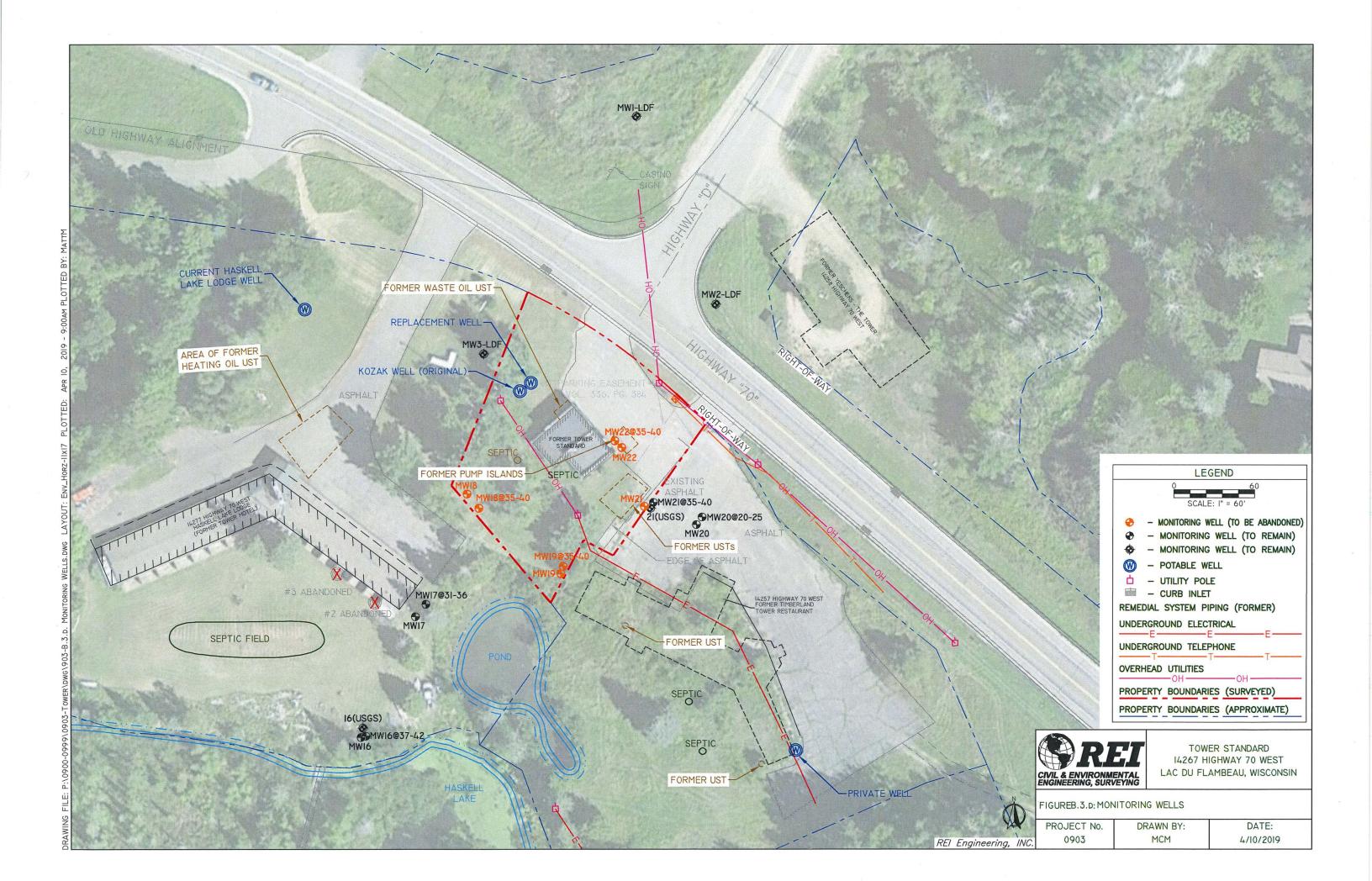
Dave Larsen – REI (via email)

Carrie Stoltz – DNR Rhinelander (via email)

Shelly Allness - DNR Madison (via email)

Bob Egan – US EPA Region 5 (via email)









Remediation and Redevelopment Program

June 2017

Continuing Obligations for Environmental Protection Responsibilities of Wisconsin Property Owners Wis. Stat. § 292.12

Purpose

This fact sheet is intended to help property owners understand their legal requirements under s. 292.12, Wis. Stats., regarding continuing obligations that arise due to the environmental condition of their property.

Introduction

The term "continuing obligations" refers to certain actions for which property owners are responsible following a completed environmental cleanup. They are sometimes called environmental land use controls or institutional controls. These legal obligations, such as a requirement to maintain pavement over contaminated soil, are most often found in a cleanup approval letter from the state.

Less commonly, a continuing obligation may apply where a cleanup is not yet completed but a cleanup plan has been approved, or at a property owned by a local government that is exempt from certain cleanup requirements.

What Are Continuing Obligations?

Continuing obligations are legal requirements designed to protect public health and the environment in regard to contamination that remains on a property.

Continuing obligations still apply after a property is sold. Each new owner is responsible for complying with the continuing obligations.

Background

Wisconsin, like most states, allows some contamination to remain after cleanup of soil or groundwater contamination (residual contamination). This minimizes the transportation of contamination and reduces cleanup costs while still ensuring that public health and the environment are protected.

The Department of Natural Resources (DNR), through its Remediation and Redevelopment (RR) Program, places sites or properties with residual contamination on a public database in order to provide notice to interested parties about the residual contamination and any associated continuing obligations. Please see the "Public Information" section on page 3 to learn more about the database. (Prior to June 3, 2006, the state used deed restrictions recorded at county courthouses to establish continuing obligations, and those deed restrictions have also been added into the database.)

Types of Continuing Obligations

1. Manage Contaminated Soil that is Excavated

If the property owner intends to dig up an area with contaminated soil, the owner must ensure that proper soil sampling, followed by appropriate treatment or disposal, takes place. Managing contaminated soil must be done in compliance with state law and is usually done under the guidance of a private environmental professional.

Publication: RR-819

dnr.wi.gov Search: Continuing Obligations

2. Manage Construction of Water Supply Wells

If there is soil or groundwater contamination and the property owner plans to construct or reconstruct a water supply well, the owner must obtain prior DNR approval to ensure that well construction is designed to protect the water supply from contamination.

Other Types of Continuing Obligations

Some continuing obligations are designed specifically for conditions on individual properties. Examples include:

- keeping clean soil and vegetation over contaminated soil;
- keeping an asphalt "cover" over contaminated soil or groundwater;
- maintaining a vapor venting system; and
- notifying the state if a structural impediment (e.g. building) that restricted the cleanup is removed. The owner may then need to conduct additional state-approved environmental work.

It is common for properties with approved cleanups to have continuing obligations because the DNR generally does not require removal of all contamination.

Property owners with the types of continuing obligations described above will find these requirements described in the state's cleanup approval letter or cleanup plan approval, and *must*:

- comply with these property-specific requirements; and
- obtain the state's permission before changing portions of the property where these requirements apply.

The requirements apply whether or not the person owned the property at the time that the continuing obligations were placed on the property.

Changing a Continuing Obligation

A property owner has the option to modify a continuing obligation if environmental conditions change. For example, petroleum contamination can degrade over time and property owners may collect new samples showing that residual contamination is gone. They may then request that the DNR modify or remove a continuing obligation. Fees are required for the DNR's review of this request and for processing the change to the database (\$1050 review fee, \$300/\$350 database fee). Fees are subject to change; current fees are found in Wis. Admin. § NR 749 online at http://docs.legis.wisconsin.gov/code/admin_code/nr/700/749.

Public Information

The DNR provides public information about continuing obligations on the Internet. This information helps property owners, purchasers, lessees and lenders understand legal requirements that apply to a property. The DNR has a comprehensive database of contaminated and cleaned up sites, *BRRTS* on the *Web*. This database shows all contamination activities known to the DNR. Site specific documents are found under the *Documents* section. The information includes maps, deeds, contaminant data and the state's closure letter. The closure letter states that no additional environmental cleanup is needed for past contamination and includes information on property-specific continuing obligations. If a cleanup has not been completed, the state's approval of the remedial action plan will contain the information about

continuing obligations.

Properties with continuing obligations can generally be located in the DNR's *RR Sites Map*. RR Sites Map provides a map view of contaminated and cleaned up sites, including sites with continuing obligations, and links to BRRTS on the Web. *BRRTS on the Web* and *RR Sites Map* are part of the Wisconsin Remediation and Redevelopment Database (WRRD) at http://dnr.wi.gov/topic/Brownfields/wrrd.html.

If a completed cleanup is shown in *BRRTS* on the Web but the site documents cannot be found in the documents section, the DNR's closure letter can still be obtained from a regional office. For assistance, please contact a DNR Environmental Program Associate (see the RR Program's Staff Contact web page at dnr.wi.gov/topic/Brownfields/Contact.html).

Off-Site Contamination: When Continuing Obligations Cross the Property Line

An off-site property owner is someone who owns property that has been affected by contamination that moved through soil, sediment or groundwater from another property. Wis. Stat. § 292.13 provides an exemption from environmental cleanup requirements for owners of "off-site" properties. The DNR will generally not ask off-site property owners to investigate or clean up contamination that came from a different property, as long as the property owner allows access to his or her property so that others who are responsible for the contamination may complete the cleanup.

However, off-site property owners are legally obligated to comply with continuing obligations on their property, even though they did not cause the contamination. For example, if the state approved a cleanup where the person responsible for the contamination placed clean soil over contamination on an off-site property, the owner of the off-site property must either keep that soil in place or obtain state approval before disturbing it.

Property owners and others should check the *Public Information* section above if they need to:

- determine whether and where continuing obligations exist on a property;
- review the inspection, maintenance and reporting requirements, and
- contact the DNR regarding changing that portion of the property. The person to contact is the person that approved the closure or remedial action plan.

Option for an Off-Site Liability Exemption Letter

In general, owners of off-site properties have a legal exemption from environmental cleanup requirements. This exemption does not require a state approval letter. Nonetheless, they may request a property-specific liability exemption letter from the DNR if they have enough information to show that the source of the contamination is not on their property. This letter may be helpful in real estate transactions. The fee for this letter is \$700 under Chapter NR 749, Wis. Adm. Code. For more information about this option, please see the RR Program's Liability web page at dnr.wi.gov/topic/Brownfields/Liability.html.

Legal Obligations of Off-Site Property Owners

- Allow access so the person cleaning up the contamination may work on the off-site property (unless the off-site owner completes the cleanup independently).
- Comply with any required continuing obligations on the off-site property.

Required Notifications to Off-Site Property Owners

- 1. The person responsible for cleaning up contamination must notify affected property owners of any proposed continuing obligations on their off-site property **before** asking the DNR to approve the cleanup. This is required by law and allows the off-site owners to provide the DNR with any technical information that may be relevant to the cleanup approval.
 - When circumstances are appropriate, an off-site neighbor and the person responsible for the cleanup may enter into a "legally enforceable agreement" (i.e. a contract). Under this type of private agreement, the person responsible for the contamination may also take responsibility for maintaining a continuing obligation on an off-site property. This agreement would not automatically transfer to future owners of the off-site property. The state is not a party to the agreement and cannot enforce it.
- 2. If a cleanup proposal that includes off-site continuing obligations is approved, the DNR will send a letter to the off-site owners detailing the continuing obligations that are required for their property. Property owners should inform anyone interested in buying their property about maintaining these continuing obligations. For residential property, this would be part of the real estate disclosure obligation.

More Information

For more information, please visit the RR Program's Continuing Obligations website at dnr.wi.gov/topic/Brownfields/Residual.html.

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Chief, Public Civil Rights, Office of Civil Rights, U.S. Department of the Interior, 1849 C. Street, NW, Washington, D.C. 20240.

This publication is available in alternative format (large print, Braille, etc.) upon request. Please call for more information. Note: If you need technical assistance or more information, call the Accessibility Coordinator at 608-267-7490 / TTY Access via relay - 711



Using Natural Attenuation to Clean Up Contaminated Groundwater:

What Landowners Should Know

RR-671 December 2016

What Is Natural Attenuation?

Natural attenuation makes use of natural processes in soil and groundwater to contain the spread of contamination and to reduce the amount of contamination from chemical releases.

Natural attenuation is an *in-situ* treatment method. This means that contaminants are left in place while natural attenuation works on them. Natural attenuation is relied upon to clean up contamination that remains after the source of the contamination is removed. An example of a source of contamination would be a leaking underground petroleum tank.

How Does Natural Attenuation Work?

Natural attenuation processes work at many sites, but the rate and degree of effectiveness varies from property to property, depending upon the type of contaminants present and the physical, chemical and biological characteristics of the soil and groundwater.

Natural attenuation processes can be divided into two broad categories – destructive and non-destructive. Destructive processes destroy contaminants. The most common destructive process is **biodegradation**.

Non-destructive processes do not destroy the contaminant, but reduce contaminant concentrations in groundwater through **dilution**, **dispersion** or **adsorption**.

Biodegradation

Biodegradation is a process in which micro-organisms that naturally occur in soil and groundwater (e.g. yeast, fungi, or bacteria), break down, or degrade hazardous substances to less toxic or non-toxic substances. Microorganisms, like humans, eat and digest organic compounds for nutrition and energy (organic compounds contain carbon and hydrogen atoms).

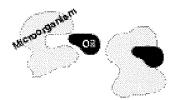
Some types of microorganisms can digest organic substances such as fuels or solvents that are hazardous to humans. Microorganisms break down the organic contaminants into harmless products — mainly carbon dioxide and water. Once the contaminants are degraded, the microorganism populations decline because they have used their food sources. These small populations of microorganisms pose no contaminant or health risk.

Many organic contaminants, like petroleum, can be biodegraded by microorganisms in the underground environment. For example, biodegradation processes can effectively cleanse soil and groundwater of hydrocarbon fuels such as gasoline and benzene, toluene, ethylbenzene, and xylene – known as the BTEX compounds, under certain conditions.

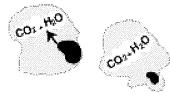
Biodegradation can also breakdown other contaminants in groundwater such as trichloroethylene (TCE), a chlorinated solvent used in metal cleaning. However, the processes involved are harder to predict and are less effective at contaminant removal compared to petroleum-contaminated sites.







Microorganisms eat oil or other organic contaminant



Microorganisms digest oil and convert it to carbon dioxide (CO₂) and water (H₂O)



Microorganisms give off CO₂ and H₂O

Figure 1. Schematic Diagram of Aerobic Biodegradation in Soil

Dilution and Dispersion

The effects of dilution and dispersion reduce contaminant concentrations but do not destroy contaminants. Clean water from the surface seeps underground to mix with and dilute contaminated groundwater.

Other processes that lead to reduced concentrations of contaminants include clean groundwater flowing into contaminated areas, and the dispersion of pollutants as they spread out and away from the main path of the contaminated plume.

Adsorption

Adsorption occurs when contaminants attach or "sorb" to underground particles. Most oily substances (like petroleum compounds) repel water and escape from the groundwater by attaching to organic matter and clay minerals in the subsurface.

This process holds back or retards contaminant movement and reduces the concentration of contaminants in the groundwater. However, like dilution and dispersion, adsorption does not destroy contaminants.

Why Consider Natural Attenuation To Clean Up Soil And Groundwater?

In certain situations, natural attenuation is an effective, inexpensive cleanup option and the most appropriate way to remediate some contamination problems. Natural attenuation focuses on confirming and monitoring natural remediation processes rather than relying on engineered or "active" technologies (such as pumping groundwater, treating it above ground, then disposing of the treated water).

Contaminants from petroleum are good candidates for natural attenuation because they are among the most easily destroyed by biodegradation. Natural attenuation is non-invasive, which allows treatment to go on below ground, while the surface can continue to be used.

Natural attenuation can also be less costly than active engineered treatment options, and requires no special equipment, energy source, or disposal of treated soil or groundwater.

Will Natural Attenuation Work At My Property?

Whether natural attenuation will work at a particular location is determined by investigating the soil and groundwater. These investigations determine the type of contaminants present, the levels of contamination, and the physical and chemical conditions that lead to biodegradation of the contaminants.

In order to rely on natural attenuation, responsible parties are required to confirm that natural attenuation processes are working by monitoring the soil and groundwater over a period of time to show that the contaminant concentrations are decreasing and that the contamination is no longer spreading.

Those conducting the cleanup need to know whether natural attenuation, or any proposed remedy, will reduce the contaminant concentrations in the soil and groundwater to legally acceptable limits within a reasonable period of time.

Natural attenuation may be an acceptable option for sites where active remediation has occurred and has reduced the concentration of contaminants (for instance, removing leaking underground tanks and contaminated soil).

However, natural attenuation is not an appropriate option at all sites. If the contamination has affected a drinking water well, or has entered a stream or lake, active cleanup options may be necessary to make sure people and the environment are protected from direct contact with the contamination.

The speed or rate of natural attenuation processes is typically slow. Monitoring is necessary to show that concentrations decrease at a sufficient rate to ensure that contaminants will not become a health threat in the future.

Closure Of Contaminated Sites Using Natural Attenuation As A Final Remedy

When contamination is discovered at a property (such as a gas station with leaking underground tanks), the person who is responsible for causing the contamination, and persons having possession or control of hazardous substances that have been discharged, have the responsibility to remove the source of contamination and investigate and clean up the contamination that has escaped into the soil and groundwater.

The contaminant release must be reported to the Wisconsin Department of Natural Resources (DNR) and the site investigation and cleanup are overseen by a state agency. Depending on the type of contaminant, the oversight agency could be the Department of Agriculture, Trade and Consumer Protection or Department of Natural Resources.

When the cleanup has complied with state standards, the person responsible for the contamination will ask the state agency for closure of the case. If natural attenuation is relied upon to finish cleaning up a contaminated property after closure, the responsible person will need to show that contaminant concentrations are not spreading, that contaminant concentrations are stable or decreasing, and that the concentrations will decrease in the future until state groundwater standards are met.

Because natural attenuation processes are slow, it may take many years before the properties with contamination are clean. State rules require that all owners of properties where groundwater contamination has spread must be informed of the contamination below their property.

In addition, the properties with groundwater contamination exceeding state groundwater enforcement standards must be listed on a database to notify future owners and developers of the presence of contamination. If future monitoring occurs and shows that natural attenuation processes have removed the contaminants to state-required cleanup levels, then the properties can be removed from the database.

The state agency will grant closure if the site investigation and monitoring shows that natural attenuation will clean up groundwater to state standards within a reasonable period of time. All state rules for cleanup must be met and the person who is responsible for the contamination must comply with all conditions of the state's closure approval.

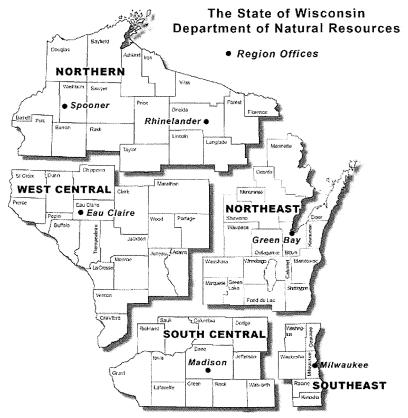
Publications

The following publications provide additional information on natural attenuation. Websites where these can be downloaded free of charge are also listed.

- A Citizen's Guide to Bioremediation, September 2012, EPA 542-F-12-003; https://www.epa.gov/sites/production/files/2015-04/documents/a citizens guide to bioremediation.pdf
- Commonly Asked Questions Regarding the Use of Natural Attenuation for Petroleum-Contaminated Sites at Federal Facilities, www.clu-in.org/download/techfocus/na/na-petrol.pdf
- Monitored Natural Attenuation of Petroleum
 Hydrocarbons: U.S. EPA Remedial Technology Fact Sheet, May 1999, EPA 600-F-98-021; www.clu-in.org/download/remed/pet-hyd.pdf
- Monitored Natural Attenuation of Chlorinated Solvents, May 1999, EPA 600-F-98-0022; www.clu-in.org/download/remed/chl-solv.pdf
- Guidance on Natural Attenuation for Petroleum Releases, WI DNR, Bureau for Remediation and Redevelopment, March 2003, PUB-RR-614; dnr.wi.gov/files/PDF/pubs/rr/RR614.pdf

Contact Information

If you have questions about natural attenuation contact a <u>DNR Environmental Program Associate (EPA)</u> in your local DNR regional office. The EPA can direct you to a project manager.



Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.